

NOAA UPDATE

Science Advisory Board

Kathryn D. Sullivan, Ph.D.
Under Secretary Of Commerce for Oceans and
Atmosphere
and NOAA Administrator

July 29, 2014
Boulder, Colorado



WELCOME



Lynn Scarlett
SAB Chair

CHANGES IN NOAA LEADERSHIP



Dr. Rick Spinrad
Chief Scientist



David Kennedy
Consultant



Gary Reisner
Acting Budget Director



Zachary Goldberg
Acting CIO



Mark Paese
NESDIS Acting AA



Craig McLean
OAR Acting AA

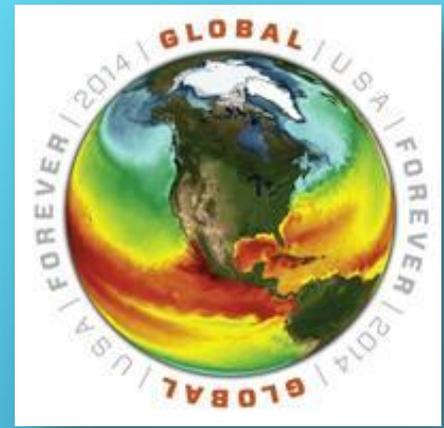
Achieve organizational excellence

AWARDS



"Earth: Our home. NOAA's mission." 

U.S. Postage Stamp



'Making a Difference' Award



Space Foundation's Space Technology Hall of Fame

A screenshot of the MarineCadastre.gov website. The main content area displays the text: 'marinecadastre.gov wins DOC 2014 Energy and Environmental Stewardship Award for Renewable Energy'. Below this, a dark blue box contains the text: 'Runner Up: NWS Thomas McGuire, Thomas Day and Steve McHale'. The website's navigation bar includes 'Maps', 'Data', 'Uses', 'Tools', 'News', and 'Abo'.

AWARDS

- **Dr. Mike Cantin, Dr. Arthur Chiu Hurricane Preparedness Award** from the Hawaii State Hurricane Advisory Committee and State of Hawaii Civil Defense Agency
- Scott Lindsey, Alaska River Forecast Center, **2014 NWS Gregg B. Rishel Award**
- **Dr. Tim Beechie**, NWFSC, Western Division of the American Fisheries Society **2014 Award of Excellence**
- **Dr. Jay Barlow**, SWFSC, **President**, Society for Marine Mammology
- **Robin Waples**, NWFSC, **President**, American Genetic Association & Edward T. LaRoe III Memorial Award, Society of Conservation Biology
- **Dr. Steven Bograd**, SWFSC, invited to be **Editor-in-Chief** of Fisheries Oceanography
- **Melinda Marquis**, OAR, **2014 Annual Achievement Award** from the Utility Variable-Generation Integration Group (UVIG)
- **Dr. Melissa Kenney**, OAR, 2013 Water Resources (WRR) **Research Editor's Choice Award**



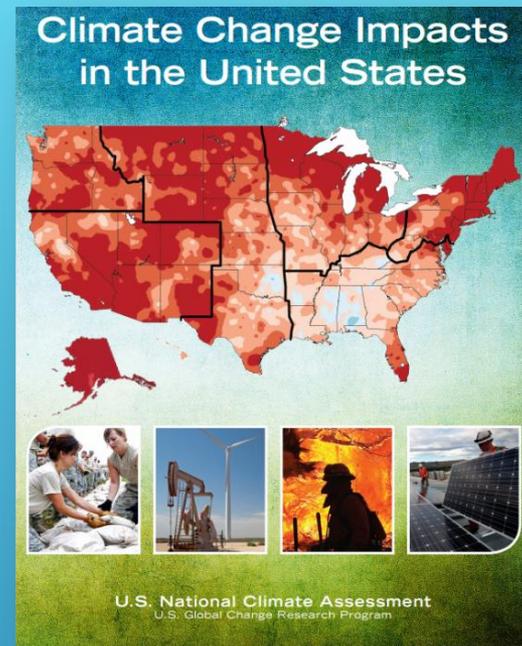
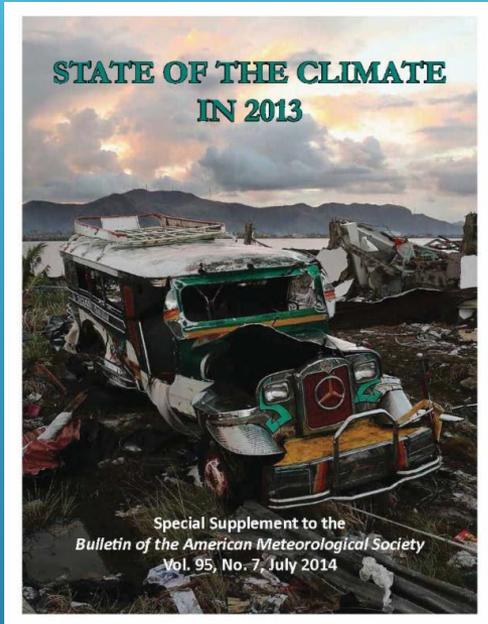
Richard Breckenridge
101-year-old NY farmer
84 years as an NWS
Cooperative Weather
Observer

BEST PAPER & POSTER AWARDS

Dr. Jose Castro, SWFSC
Marine Fisheries Review 2013
Best Paper Award

George Graettinger & Bill Lehr, NOS/OR&R
John I Davidson President's
Award for Practical Papers
by the American Society for
Photogrammetry and
Remote Sensing

BAMS STATE OF THE CLIMATE in 2013



3RD NATIONAL CLIMATE ASSESSMENT

BREAKING NEWS...

- **New NOAA climate model** shows southwestern Australia's long-term rainfall decline due to human-caused climate change. Model improves regional precipitation predictions more broadly
- **Tropical cyclones** reach maximum intensity closer to the poles
- **First evidence** that **acidity** of continental shelf waters off the West Coast is dissolving the shells of pteropods

NOAA

America's Environmental Intelligence Agency

Putting environmental information into the hands of people who need it.



ENVIRONMENTAL INTELLIGENCE



Observations

Monitoring

Assessment

Modeling

Forecasts and Products

TOP PRIORITIES FOR 2014-2018

1

Make communities more resilient

2

Evolve the Weather Service

3

Invest in observational infrastructure

4

Achieve Organizational Excellence



Make communities more resilient

HEALTHY OCEANS

Announced at Capitol Hill Oceans Week

Sanctuary Nomination Process

For the first time in two decades, NOAA invites communities across the nation to nominate their most treasured places in our marine and Great Lakes waters for consideration as national marine sanctuaries.

In response to ongoing widespread interest from the public, NOAA has launched a new, locally driven sanctuary nomination process developed with input from more than 18,000 public comments. Throughout the nomination process, NOAA will be available to answer questions and provide guidance to nominating communities and other interested parties. NOAA will also update nominators on the progress of the agency's review of their nomination.

Actor and activist Edward James Olmos lends his voice to the new sanctuary nomination process and offers a challenge to the American people. [Watch in HD.](#)

NOMINATE.NOAA.GOV

US STATE DEPT “OUR OCEAN” CONFERENCE

- Expand Pacific marine sanctuaries
- Develop a comprehensive program aimed at combating seafood fraud and the global black-market fish trade



Make communities more resilient

INTEGRATING ECOSYSTEM-BASED MANAGEMENT AND ECONOMIC VITALITY

Status of the U.S. Fisheries 2013

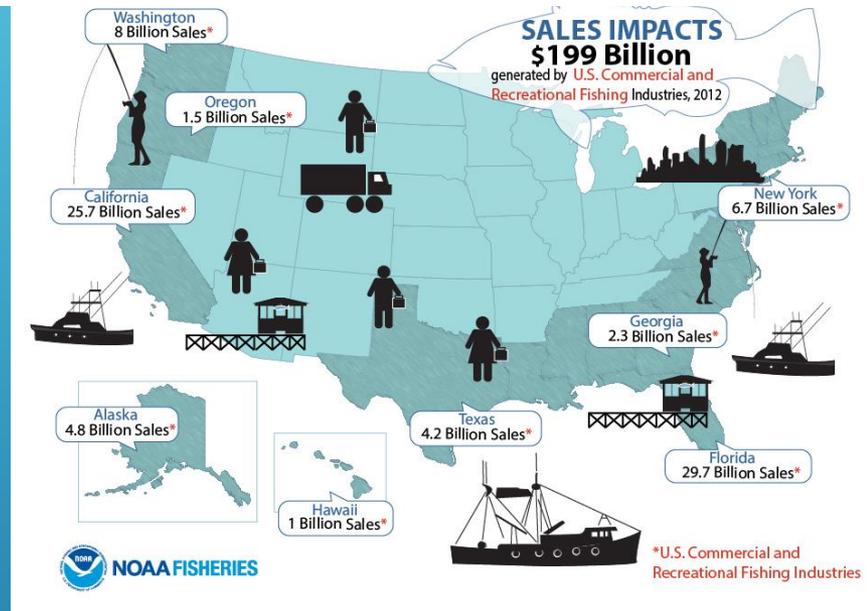
2 stocks rebuilt in 2013

- S Atlantic black sea bass
- Sacramento River fall chinook salmon

Now 34 stocks total rebuilt

Efforts to reauthorize
Magnuson-Stevens Act under way

Fisheries Economics of the U.S. 2012

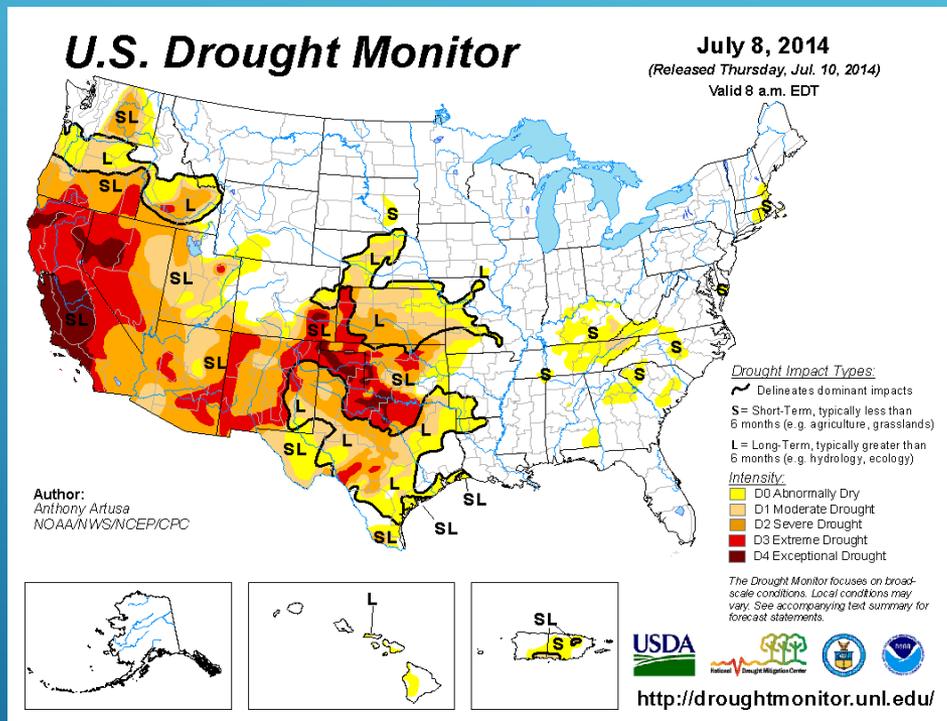


Science @ the Interface of Climate Change/Stock Assessment

- 1st methodology to rapidly assess vulnerability of U.S. marine fish stocks to changes in climate and ocean conditions

Make communities more resilient

INTEGRATING OBSERVATIONS & RESEARCH INTO REGIONAL DROUGHT MANAGEMENT



NOAA-WESTERN GOVERNORS ASSOCIATION MOU

- Coordinate snowpack and soil moisture monitoring in the Missouri River Basin and in the Mountain West
- Improve early warning capabilities for wildfires to facilitate proactive decisions across the states.
- Promote collaboration among researchers, resource managers, businesses and the public

*** NIDIS Act reauthorized in 2014 ***

Make communities more resilient

CLIMATE RESILIENCE TOOLKIT

CLIMATE RESILIENCE TOOLKIT

Home Topics Tools Taking Action Climate Explorer Get Help

Topics

Select a topic of interest below to learn about climate-related risks and opportunities, as well as strategies for building resilience in a variety of ways.

- COASTAL FLOOD RISK
- ECOSYSTEM VULNERABILITY
- ENERGY SUPPLY AND INFRASTRUCTURE
- FOOD RESOURCES
- HUMAN HEALTH
- TRANSPORTATION AND SUPPLY CHAIN
- WATER RESOURCES

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CLIMATE EXPLORER

MAP LAYERS HISTORICAL DATA

TOPICS:

Coastal Flood Risk

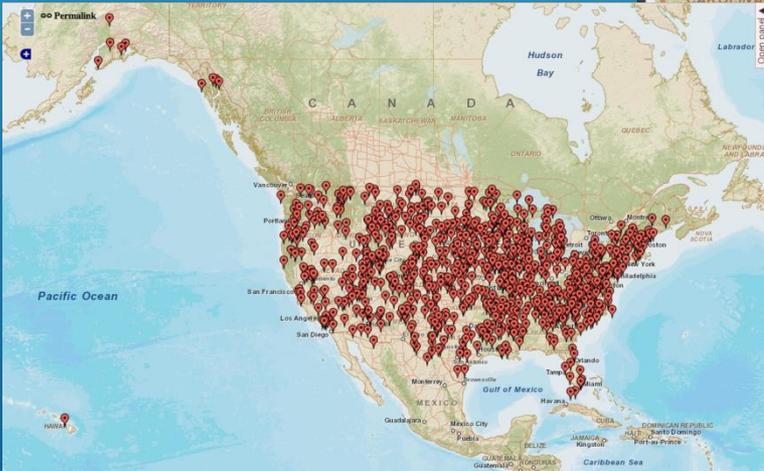
Climate Stressors

- Sea Level Inundation (1ft) 100%
- Sea Level Inundation (2ft) 100%
- Sea Level Inundation (3ft) 55%
- Sea Level Inundation (4ft) 100%

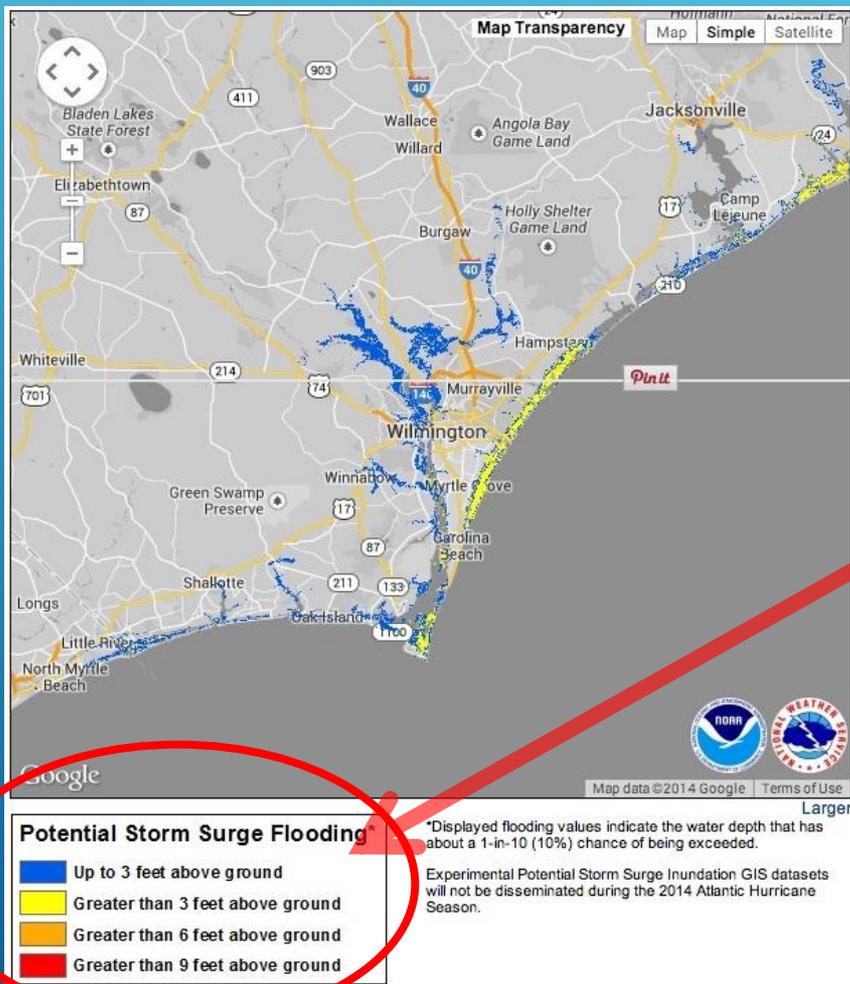
Assets Impacted

- Coastal Vulnerability to Sea Level Rise 100%
- Social Vulnerability Index 39%
- Land Cover (2006) 100%
- Hospitals 100%

Climate Data Explorer



Evolve the Weather Service STORM SURGE FLOOD MAPS Experimental



2012 NHC Advisory text format completed

2014 Storm surge inundation graphic (experimental)

- First release – Arthur
- Cross-LO
- Social science & human factors research

2015 Storm surge watch/warning (experimental)

Potential storm surge flooding map for Wilmington, SC area for Tropical Storm Arthur



Evolve the Weather Service **NATIONAL WATER CENTER**

Tuscaloosa, Alabama



- ▶ **A key part of developing a national “common operating picture” among IWRSS partners**
- ▶ **Integral component of a fully integrated water resources program directed towards consistent products and service from floods to droughts**
- ▶ **Catalyst for accelerating research to operations**
- ▶ **Provides the basis for Impact Based Decision Support Services**
- ▶ **Nerve center for optimization of data-flow among RFCs and IWRSS partners**

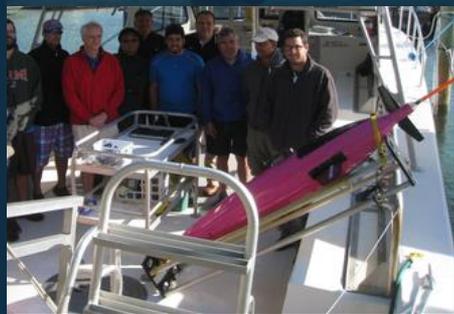


Invest in OBSERVATIONAL INFRASTRUCTURE

OPERATIONAL



EXPERIMENTAL

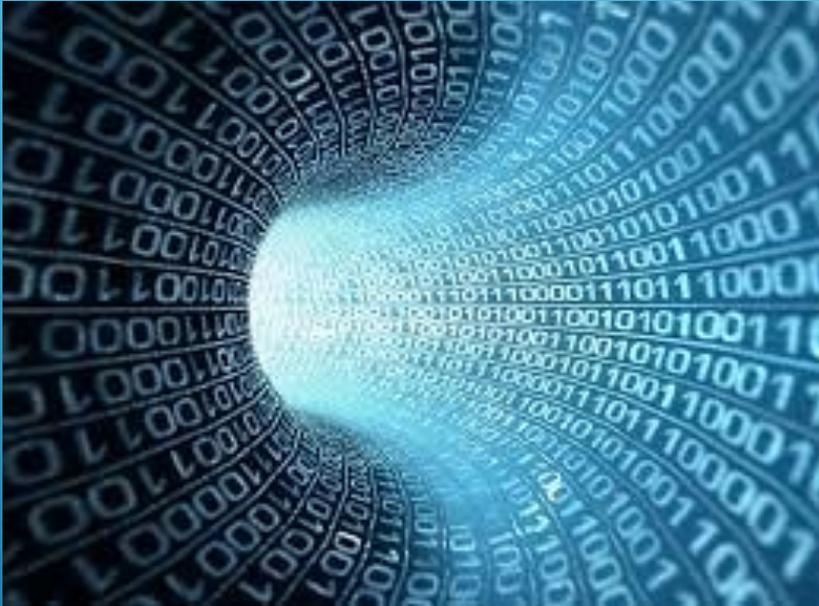


PORTS Jacksonville, FL
Multiple services
Cross-LO collaboration



BIG DATA RFI

PUBLIC-PRIVATE PARTNERSHIPS TO UNLEASH NOAA DATA



- ▶ **> 70 responses** from industry and academia, individuals & teams
- ▶ **Clear message – GET STARTED!**
- ▶ **Next steps** - work with other agencies to create an ecosystem around data that can lead to lasting impact on the economy

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